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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/797,854	03/10/2004	Yu-Liang Lin	Q1220	3759
34335 7590 01/27/2009 PAI PATENT & TRADEMARK LAW FIRM 1001 FOURTH AVENUE, SUITE 3200 SEATTLE, WA 98154				
EXAMINER				
KRAMER, DEVON C				
ART UNIT		PAPER NUMBER		
3746				
MAIL DATE		DELIVERY MODE		
01/27/2009		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/797,854

Applicant(s)

LIN ET AL.

Examiner

DEVON C. KRAMER

Art Unit

3746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 November 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10 and 21-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10 21-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 10 and 21-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takahashi et al (5343104) in view of Murata et al (20010036409).

In re claims 10, 21, 23 and 24 Takahashi teaches a fan structure comprising a hub 12, a motor (218, 217) located inside the hub, a plurality of fan blades (212) connected to the hub, and a circuit board (224) connected to the motor, wherein the circuit board comprises a protrusion (232), which extends outside the circumference of the hub and carries thereon a circuit component (229), and the protrusion comprises a cutout that extends from a tip of the protrusion to the heat-generating component. Takahashi lacks the teaching of the circuit component being a heat generating component.

Murata teaches that it is desirable to cool the electric components of a fan motor on an integrated circuit board (122). (Abstract).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to have provided the protrusion area of Takahashi with an heat

generating electronic component in view of the teachings of Murata et al; in order to prevent overheating of the motor or its components.

In re claims 22 and 25, Murata teaches that it is desirable to cool an inverter circuit with semiconductor switching devices.

Response to Arguments

Applicant's arguments with respect to claims 10 and 21-25 have been considered but are moot in view of the new ground(s) of rejection.

Please note that the examiner has found applicant's arguments persuasive in regards to the replacement of the thermistor of Takahashi would destroy the purpose of the invention. In response, the examiner has modified the reference to Takahashi to include a heat generating component in addition to the thermistor on the protruding portions of the board.

Conclusion

Any inquiry concerning this communication should be directed to DEVON C. KRAMER at telephone number (571)272-7118.

/Devon C Kramer/
Supervisory Patent Examiner, Art Unit 3746

Devon C Kramer
SPE
Art Unit 3746